



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,295	09/29/2003	Edward George Butt	TUC920030159US1	4092

7590 04/03/2007
Keith A. Bates
IBM Corporation
90A/9032-1
9000 S. Rita Road
Tucson, AZ 85744

EXAMINER

MASKULINSKI, MICHAEL C

ART UNIT	PAPER NUMBER
----------	--------------

2113

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/674,295	Applicant(s) BUTT ET AL.	
	Examiner Michael C. Maskulinski	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Non-Final Office Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are as follows.

Referring to claims 1, 8, and 14:

Step (B) states, "in response to determining that said state action has executed with at least one error", however, the step of determining has been omitted.

Step (D) states, "in response to determining that said next state action is not a last state action", however, the step of determining has been omitted.

Referring to claims 3, 9, and 15:

Step (A) states, " in response to determining that an error recovery count for a current state action is less than a maximum error recovery count", however, the step of determining has been omitted.

Step (B) states, "in response to determining that an error recovery is possible", however, the step of determining has been omitted.

Step (C) states, "in response to determining that said at least one error recovery action was successful", however, the step of determining has been omitted.

Referring to claims 5, 11, and 17, step (A) states, "in response to exiting said error recovery procedure with a passed status", however, the step of exiting has been omitted.

Referring to claims 6, 12, and 18, step (A) states, "in response to exiting said automated error recovery process with a failed status", however, the step of exiting has been omitted.

3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claims 1, 8, and 14:

Step (C) states, "retrieving a next state action". The Examiner is unsure as to whether this is part of the error recovery procedure in step (B) or whether it occurs after an error has not been detected.

Step (D) states, "returning to step (A)" and then step (E) follows. The examiner is unsure as to how one would arrive at step (E) since the method always loops back to step (A).

Referring to claim 3, claim 3 includes steps (A), (B), and (C). However, when claim 3 is combined with claim 1, there are two of steps (A), (B), and (C). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 4, claim 4 states, "wherein step (B) further comprises the step of (A)...". This is indefinite because it is unknown as to which step (B) comprises this step (A). Further, it would be unknown as to which step (A) is returned to in claim 1.

Referring to claim 5, claim 5 states, "wherein step (B) further comprises the step of (A)...". However, when claim 5 is combined with claim 1, there are two of step (A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 6, claim 6 states, "wherein step (B) further comprises the step of (A)...". However, when claim 6 is combined with claim 1, there are two of step (A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 7, claim 7 includes steps (A) and (B). However, when claim 7 is combined with claims 1 and 6, there are three of step (A) and two of step (B). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 9, claim 9 includes steps (A), (B), and (C). However, when claim 9 is combined with claim 8, there are two of steps (A), (B), and (C). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 10, claim 10 states, "wherein step (B) further comprises the step of (A)...". This is indefinite because it is unknown as to which step (B) comprises this step (A). Further, it would be unknown as to which step (A) is returned to in claim 8.

Referring to claim 11, claim 11 states, "wherein step (B) further comprises the step of (A)...". However, when claim 11 is combined with claim 8, there are two of step (A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 12, claim 12 states, "wherein step (B) further comprises the step of (A)...". However, when claim 12 is combined with claim 8, there are two of step (A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 13, claim 13 includes steps (A) and (B). However, when claim 13 is combined with claims 8 and 12, there are three of step (A) and two of step (B). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 15, claim 15 includes steps (A), (B), and (C). However, when claim 15 is combined with claim 14, there are two of steps (A), (B), and (C). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 16, claim 16 states, "wherein step (B) further comprises the step of (A)...". This is indefinite because it is unknown as to which step (B) comprises this step (A). Further, it would be unknown as to which step (A) is returned to in claim 14.

Referring to claim 17, claim 17 states, "wherein step (B) further comprises the step of (A)...". However, when claim 17 is combined with claim 14, there are two of step

(A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 18, claim 18 states, "wherein step (B) further comprises the step of (A)...". However, when claim 18 is combined with claim 14, there are two of step (A).. This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Referring to claim 19, claim 19 includes steps (A) and (B). However, when claim 19 is combined with claims 14 and 18, there are three of step (A) and two of step (B). This is indefinite since step (D) states "returning to step (A)" and it would be unknown as to which step (A) is returned to.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Brannock et al., US 2003/0066062 A1.

Referring to claim 1:

- a. In paragraph 0049, Brannock et al. disclose updating a firmware file system ((A.) executing a state action of said storage controller LIC update process).
- b. In paragraph 0049, Brannock et al. disclose full recovery in the event of an anomaly during update, such as a power failure ((B.) in response to determining that said state action has executed with at least one error, entering an error recovery procedure).
- c. In paragraph 0049, Brannock et al. disclose that as the update is performed, the state bits in the state field are changed ((C.) retrieving a next state action).
- d. In paragraph 0041, Brannock et al. disclose that upon validation of the new file as indicated by file data valid state, the original file, which has been marked for update, becomes invalid ((D.) in response to determining that said next state action is not a last state action, returning to step (A.) and (E.) ending said storage controller LIC update process).

Referring to claim 5, in paragraph 0049, Brannock et al. disclose full recovery in the event of an anomaly during update, such as a power failure (wherein step (B.) further comprises the step of: (A.) in response to exiting said error recovery procedure with a passed status, reentering said LIC update process at an error recovery passed state action determined by said error recovery procedure).

Allowable Subject Matter

6. Claims 8-19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
7. Claims 2-4 and 6-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art is related to firmware updating and upgrading..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2113

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael C Maskulinski
Examiner
Art Unit 2113